

REMARKS

Preliminarily, Applicant asserts that the present rejection cannot be made final because the claim amendments previously submitted merely added the subject matter of dependent claim 4 into claim 1; as a result, the previously submitted claim amendments did not raise new issues requiring further search and consideration because the subject matter of claim 4 should have already been searched. Accordingly, withdrawal of the finality of the rejection is requested.

By this Amendment, the figures and abstract are corrected to overcome the objections noted in the outstanding Office Action. Applicant notes that the originally filed claim 1 stated that the spindle drive includes a spindle connected with a freewheel permitting the rotation of the spindle in the direction corresponding to the closing direction of the door and preventing the rotation of the spindle in the direction corresponding to the opening direction; original claim 1 also referred to the freewheel as reference numeral 1, whereas certain parts of the specification refer to the spindle as reference numeral 1. Therefore, Applicant has elected to modify the specification to clarify that the spindle/freewheel combination is referred to as reference numeral 1. However, Applicant has amended Fig. 1 to more clearly denote the car body 4.

Further, claim 1 is amended to merely clarify that the lifting magnet is a bidirectional lifting magnet; this clarification does not result in any new issues requiring further search or consideration because the nature of the lifting magnet as bidirectional was previously clear based on the claim language that the lifting magnet is configured to release the releasable coupling from a closed locked position, wherein the lifting magnet is configured to act as a closing magnet configured to lock the coupling in the closed locked position. No new matter is submitted in this Amendment. Claims 1 and 5 are pending.

The Office Action rejected claims 1 and 5 under 35 U.S.C. 103(a) as being obvious from the combined teachings of previously cited Fink (US 6,189,265), Weishar et al. (U.S. 5,083,600; hereafter “Weishar”) and Fort et al. (U.S. 20050044979; hereafter “Fort”).

Applicant traverses the rejection of claims 1 and 5 because Fink, analyzed individually or in combination with Weishar and Fort, fails to teach or suggest all the features recited in the rejected claims and one of ordinary skill in the art would not have combined the teachings of Fink, Weishar and Fort in the manner hypothesized by the Office Action.

CITED PRIOR ART FAILS TO TEACH OR SUGGEST CLAIMED INVENTION

For example, the cited prior art fails to teach or suggest the claimed invention wherein the releasable coupling is configured to operate by a linkage having a dead center position between a released position of the linkage and a locked position of the linkage and the linkage has a swiveling lever which can be swiveled about a lever axis, wherein first arm of the swiveling lever is connected to the bidirectional lifting magnet, and a second arm carries rollers with an axis of rotation parallel to the lever axis, wherein the lever is configured to move a movable part of the releasable coupling between the released and locked positions, and the dead-center position is reached when a connection plane between an axis of rotation of the rollers and the lever axis is parallel to the moving direction of the movable part of the releasable coupling.

As recognized by the Office Action, Fink fails to teach or suggest the contact pressure spring, the relative relationship between the spindle drive, freewheel, the bidirectional lifting magnet and the releasable coupling. However, the Office Action asserted that Weishar and Fort remedy these deficiencies. However, Weishar merely describes an industrial door which can be coiled on a drum. The motor, which drives the drum, can be disengaged by a clutch. However, engaging or disengaging the clutch is performed by hand. Therefore, there is no solenoid or bidirectional lifting magnet acting on the clutch. Thus, Weishar is merely directed to a mechanism for turning off power to the motor by a switch when disengaging the clutch to avoid the motor turning on while the clutch is open.

Similarly, Fort also fails to teach or suggest the bidirectional lifting magnet or the other components provided in combination therewith. Fort actually discloses what is called a park pawl actuator. Such actuators are significantly different from the door drive of the present invention. More specifically, in Fort, a solenoid 14 (cited as corresponding to the claimed lifting magnet by disclosing a magnetic driving device) is used; however, the solenoid 14 does not turn any lever to engage and disengage the park pawl actuator. Rather, the only purpose of the solenoid 14 is actually to extend a plunger to block the lever. Thus, like Weishar, engaging or disengaging the park pawl is performed manually by the change gear handle of the car. Thus, even if Fink were modified in accordance with the teachings of Weishar and Fort, the resulting combination would not provide the claimed invention wherein a clutch is activated by a bidirectional lifting magnet to keep the forces low and allow a small solenoid with very small current consumption. Moreover, the resulting combination would not provide a lever that has an

upper and bottom dead center. Thus, the resulting combination would not provide a clutch wherein activation of the clutch is bistable and no power is needed to keep the clutch in the engaged or disengaged end position.

As a result, one of ordinary skill in the art could not have combined the teachings of Fink, Weishar and Fort to provide the claimed invention.

CITED PRIOR ART REFERENCES NOT COMBINABLE AS HYPOTHESIZED

Moreover, one of ordinary skill in the art would not have been motivated to modify the teachings of Fink based on Weishar and Fort to provide the claimed invention. There would be no motivation to include a magnetic lifting magnet as claimed because to do so would go against the express teachings of Weishar. More specifically, as explained in Weishar, that invention is directed at improving a “drive mechanism for an industrial door that includes a clutch which can be manually operated to disconnect the drive. A clutch is required in order to provide manual operation of the door in case of fire or a power outage or during maintenance or installation of the door”(col. 1, lines 18-23). Thus, the drive mechanism of Weishar is meant to be operated manually, i.e., without electrical power. Accordingly, one of ordinary skill in the art would not have been motivated to modify Weishar’s device to use an electrical component such as Fort’s solenoid 14 as a bidirectional lifting magnet.

Furthermore, if one of ordinary skill in the art were motivated to combine the teachings of Fink, and Weishar and modify the resulting combination to include a solenoid such as that disclosed in Fort, the inclusion would result in there being no need to include a dead center position as in Weishar. This is because, Weishar’s mechanical implementation requires the dead center to enable an operator to simply pull on the chains to actuate the lever; thus the dead center allows the device to stay in the resulting position without constant pressure at the chain. However, inclusion of a solenoid instead of the manual mechanism of Weishar would eliminate the need to include a dead center. As explained in Applicant’s specification, Applicant uses the dead center in combination with the solenoid action to reduce the power necessary and duty cycle required of the solenoid. As a result, Applicant’s invention is inventive.

Moreover, there is no clear motivation for utilizing an electrical component such as Fort’s solenoid 14 as a bidirectional lifting magnet in an actuator such as that disclosed in Fink. It is noted that both Fink and Weishar can both utilize electrical components (see Fink’s electromagnetic clutch and see also switch 40 of Weishar). It is unclear why one of ordinary

skill in the art would have been motivated to modify the teachings of Fink and Weishar to provide a bidirectional lifting magnet.

This is particularly unclear because Fort does not teach a solenoid 14 that is “bidirectional.” Nothing in Fort indicates that the solenoid 14 could be driven in alternative directions. As a result, even if the teachings of Fink and Weishar were modified based on Fort, there would be no reason to further modify the combination to include a solenoid that is bidirectional. Without such motivation, the obviousness rejection based on Fink, Weishar and Fort is improper and insufficient to reject the claimed invention.

For all of the above reasons, withdrawal of the rejection of claims 1 and 5 is respectfully requested. In view of the above, it is submitted that all of the pending claims are in condition for allowance and such action is respectfully requested. If there is any issue remaining to be resolved, the examiner is invited to telephone the undersigned at (202) 371-6371 so that resolution can be promptly effected.

It is requested that, if necessary to effect a timely response, this paper be considered a Petition for an Extension of Time sufficient to effect a timely response with the fee for such extensions and shortages in other fees, being charged, or any overpayment in fees being credited, to the Account of Barnes & Thornburg LLP, Deposit Account No. **02-1010 (566-43619)**.

Respectfully submitted,

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